SAFETY DATA SHEET

Brilliant Multiplex QPCR Master Mix - 20 reactions, Part Number 5190-7274

Section 1. Identification

1.1 Product identifier

Product name: Brilliant Multiplex QPCR Master Mix - 20 reactions, Part Number 5190-7274
Part No. (Chemical Kit): 5190-7274
Part No.: 2× Brilliant Multiplex QPCR Master Mix 5190-7273
Reference Dye 600530-53

Validation date: 7/29/2016

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses: Analytical reagent.
- 2× Brilliant Multiplex QPCR Master Mix 0.62 mL
- Reference Dye 0.1 mL (1 mM)

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer: Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency: CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status: 2× Brilliant Multiplex QPCR Master Mix
Reference Dye

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

2× Brilliant Multiplex QPCR Master Mix
H320

Ingredients of unknown toxicity: 2× Brilliant Multiplex QPCR Master Mix
Reference Dye
Not applicable.

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.4%

2.2 GHS label elements

Signal word: Warning

Hazard statements: 2× Brilliant Multiplex QPCR Master Mix
Reference Dye
H320 - Causes eye irritation.
No known significant effects or critical hazards.

Date of issue: 07/29/2016
Section 2. Hazards identification

Precautionary statements

**Prevention**
- Brilliant Multiplex QPCR Master Mix
- Reference Dye

**Response**
- Brilliant Multiplex QPCR Master Mix

**Storage**
- Brilliant Multiplex QPCR Master Mix
- Reference Dye

**Disposal**
- Brilliant Multiplex QPCR Master Mix
- Reference Dye

Supplemental label elements

2.3 Other hazards

**Hazards not otherwise classified**

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix</td>
<td>Glycerol</td>
<td>≥10 - ≤25</td>
<td>56-81-5</td>
</tr>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix</td>
<td>Reference Dye</td>
<td>None known.</td>
<td>None known.</td>
</tr>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix</td>
<td>Potassium chloride</td>
<td>≤5</td>
<td>7447-40-7</td>
</tr>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix</td>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>≤3</td>
<td>1185-53-1</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

**Eye contact**
- Brilliant Multiplex QPCR Master Mix
- Reference Dye

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Section 4. First aid measures

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Reference Dye**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Ingestion**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Reference Dye**

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms/effects, acute and delayed

**Potential acute health effects**

**Eye contact**

Causes eye irritation.

**Reference Dye**

No known significant effects or critical hazards.

**Date of issue:** 07/29/2016
## Section 4. First aid measures

### Inhalation
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No known significant effects or critical hazards.

### Skin contact
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No known significant effects or critical hazards.

### Ingestion
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

#### Eye contact
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - Adverse symptoms may include the following:
    - irritation
    - watering
    - redness
  - No specific data.

### Ingestion
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No specific data.

### Skin contact
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No specific data.

### Inhalation
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No specific data.

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

#### Notes to physician
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
  - In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

#### Specific treatments
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No specific treatment.

#### Protection of first-aiders
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
  - No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media
- **Brilliant Multiplex QPCR Master Mix**
- **Reference Dye**
  - Use an extinguishing agent suitable for the surrounding fire.
  - Use an extinguishing agent suitable for the surrounding fire.
Section 5. Fire-fighting measures

### Unsuitable extinguishing media

<table>
<thead>
<tr>
<th>Chemical</th>
<th>None known.</th>
</tr>
</thead>
</table>

| Reference Dye | None known. |

### 5.2 Specific hazards arising from the chemical

<table>
<thead>
<tr>
<th>Decomposition products may include the following materials:</th>
<th>carbon dioxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>carbon monoxide</td>
<td>carbon monoxide</td>
</tr>
<tr>
<td>nitrogen oxides</td>
<td>halogenated compounds</td>
</tr>
<tr>
<td>metal oxide/oxides</td>
<td>metal oxide/oxides</td>
</tr>
</tbody>
</table>

### 5.3 Advice for firefighters

#### Special protective actions for fire-fighters

<table>
<thead>
<tr>
<th>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</th>
<th>No action shall be taken involving any personal risk or without suitable training.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Dye</td>
<td>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.</td>
</tr>
</tbody>
</table>

#### Special protective equipment for fire-fighters

<table>
<thead>
<tr>
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</thead>
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</tr>
</tbody>
</table>

Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

| No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Reference Dye                                                                                                                   | Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
### Section 6. Accidental release measures

**For emergency responders**: Brilliant Multiplex QPCR Master Mix

- **Reference Dye**

**6.2 Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- **Reference Dye**

**6.3 Methods and materials for containment and cleaning up**

**Methods for cleaning up**: Brilliant Multiplex QPCR Master Mix

- **Reference Dye**

### Section 7. Handling and storage

#### 7.1 Precautions for safe handling

**Protective measures**: Brilliant Multiplex QPCR Master Mix

- **Reference Dye**

**Advice on general occupational hygiene**: Brilliant Multiplex QPCR Master Mix

- **Reference Dye**

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Section 7. Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Reference Dye

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations

Industrial applications, Professional applications.

Industrial sector specific solutions

Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brilliant Multiplex QPCR Master Mix</td>
<td>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
</tr>
<tr>
<td>Potassium chloride</td>
<td></td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>None.</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Section 8. Exposure controls/personal protection

**Appropriate engineering controls**

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Brilliant Multiplex QPCR Master Mix</th>
<th>Reference Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Brilliant Multiplex QPCR Master Mix</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Brilliant Multiplex QPCR Master Mix</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Brilliant Multiplex QPCR Master Mix</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Brilliant Multiplex QPCR Master Mix</td>
<td>8</td>
</tr>
</tbody>
</table>

**Date of issue:** 07/29/2016
## Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Mix</th>
<th>Reference Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point</strong></td>
<td>0°C (32°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>100°C (212°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Lower and upper explosive (flammable) limits</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## Section 10. Stability and reactivity

### 10.1 Reactivity

- **Mix** | **Reference Dye** | No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. |

### 10.2 Chemical stability

- **Mix** | **Reference Dye** | The product is stable. The product is stable. |
Section 10. Stability and reactivity

10.3 Possibility of hazardous reactions

- 2x Brilliant Multiplex QPCR Master Mix Reference Dye
  Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

- 2x Brilliant Multiplex QPCR Master Mix Reference Dye
  No specific data.

10.5 Incompatible materials

- 2x Brilliant Multiplex QPCR Master Mix Reference Dye
  May react or be incompatible with oxidizing materials.

10.6 Hazardous decomposition products

- 2x Brilliant Multiplex QPCR Master Mix Reference Dye
  Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix Glycerol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Reference Dye Potassium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix Glycerol</td>
<td>Eyes - Mild irritant, Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams, 24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Reference Dye Potassium chloride</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

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Section 11. Toxicological information

Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference Dye</strong></td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

Information on the likely routes of exposure

| Routes of entry anticipated: Oral, Dermal, Inhalation. |
| Routes of entry anticipated: Oral, Dermal, Inhalation. |

Potential acute health effects

**Eye contact**

| Causes eye irritation. |
| No known significant effects or critical hazards. |

**Inhalation**

| No known significant effects or critical hazards. |
| No known significant effects or critical hazards. |

**Skin contact**

| No known significant effects or critical hazards. |
| No known significant effects or critical hazards. |

**Ingestion**

| No known significant effects or critical hazards. |
| No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**

| Adverse symptoms may include the following: |
| irritation |
| watering |
| redness |

| No specific data. |
| No specific data. |

**Inhalation**

| No specific data. |
| No specific data. |

**Skin contact**

| No specific data. |
| No specific data. |

**Ingestion**

| No specific data. |
| No specific data. |

Delayed and immediate effects and also chronic effects from short and long term exposure

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Section 11. Toxicological information

**Short term exposure**

**Potential immediate effects**
- No known significant effects or critical hazards.

**Potential delayed effects**
- Not available.

**Long term exposure**

**Potential immediate effects**
- Not available.

**Potential delayed effects**
- Not available.

**Potential chronic health effects**

**General**
- No known significant effects or critical hazards.

**Carcinogenicity**
- No known significant effects or critical hazards.

**Reference Dye**
- No known significant effects or critical hazards.

**Mutagenicity**
- No known significant effects or critical hazards.

**Teratogenicity**
- No known significant effects or critical hazards.

**Developmental effects**
- No known significant effects or critical hazards.

**Fertility effects**
- No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Dye</td>
<td>70270.3 mg/kg</td>
</tr>
</tbody>
</table>

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>70270.3 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brilliant Multiplex QPCR Master Mix Glycerol</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Reference Dye Potassium chloride</td>
<td>Acute EC50 1337000 µg/l Fresh water Acute EC50 9.24 g/L Fresh water Acute EC50 141460 µg/l Fresh water Acute LC50 880000 µg/l Fresh water</td>
<td>Algae - Navicula seminulum Algae - Desmodesmus subspicatus Daphnia - Daphnia magna Fish - Pimephales promelas</td>
<td>96 hours 72 hours 48 hours 96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

**Date of issue:** 07/29/2016
Section 12. Ecological information

Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP\text{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x Brilliant Multiplex QPCR Master Mix</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Reference Dye Potassium chloride</td>
<td>-0.46</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (K\text{OC}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

Regulatory information

DOT / IMDG / IATA : Not regulated.

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Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**U.S. Federal regulations**

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

**SARA 302/304**

Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

Classification : Not applicable.

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1, 3-diol hydrochloride</td>
<td>≤3</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

**State regulations**

Massachusetts : The following components are listed: GLYCERINE MIST

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL

Pennsylvania : The following components are listed: 1,2,3-PROPANETRIOL

California Prop. 65

No products were found.

Canada inventory : Not determined.

**International regulations** : No products were found.

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Section 15. Regulatory information

International lists

- **Australia inventory (AICS):** Not determined.
- **China inventory (IECSC):** All components are listed or exempted.
- **Japan inventory (ENCS):** Not determined.
- **Japan inventory (ISHL):** Not determined.
- **Korea inventory:** Not determined.
- **Malaysia Inventory (EHS Register):** Not determined.
- **New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- **Philippines inventory (PICCS):** Not determined.
- **Taiwan Chemical Substances Inventory (TCSI):** Not determined.

Chemical Weapons Convention List Schedule I Chemicals: Not listed

Chemical Weapons Convention List Schedule II Chemicals: Not listed

Chemical Weapons Convention List Schedule III Chemicals: Not listed

Section 16. Other information

History

- **Date of issue:** 07/29/2016
- **Date of previous issue:** 07/25/2013
- **Version:** 2

Indicates information that has changed from previously issued version.

Notice to reader

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